

WHAT IS CLAIMED IS:

1. An optical disk apparatus in which an active layer of an optical disk is irradiated with a laser, comprising:

detection means for detecting an amount of change in a factor causing fluctuation in effective power, the effective power being the laser power at the active layer of the optical disk;

storage means for storing compensation data indicating a relationship between an amount of change in the factor causing fluctuation in effective power and an optimum emitted power corresponding to the amount of that change; and

control means for adjusting emitted power based on the compensation data and a value detected by the detection means.

2. The optical disk of claim 1, further comprising:

acquisition means for acquiring, from an optical disk on which recording is to be carried out, compensation correction values for correcting the compensation data,

wherein the control means adjusts emitted power based on the detected value, the compensation data, and the compensation correction values.

3. The optical disk of claim 1, wherein the detection means detects an amount of shift, in an optical disk radial direction, of an objective lens that focuses a laser on an active layer

of the optical disk.

4. The optical disk of claim 2, wherein the detection means detects an amount of shift, in an optical disk radial direction, of an objective lens that focuses a laser on an active layer of the optical disk.

5. The optical disk of claim 1, wherein the compensation data is set separately for each individual optical disk apparatus.

6. The optical disk of claim 2, wherein the compensation data is set separately for each individual optical disk apparatus.

7. The optical disk of claim 3, wherein the compensation data is set separately for each individual optical disk apparatus.

8. The optical disk of claim 4, wherein the compensation data is set separately for each individual optical disk apparatus.

9. A method for adjusting laser power in an optical disk apparatus in which an active layer of an optical disk is

irradiated with a laser, the method comprising:

a first step of acquiring and storing at storage means compensation data indicating a relationship between an amount of a change in a factor causing fluctuation in an effective laser power which is the laser power at the active layer of the optical disk, and an optimum emitted power corresponding to the amount of the change;

a second step of detecting from an optical disk on which recording is to be carried out an amount of a change in a factor causing fluctuation in effective power and obtaining a compensation correction value for correcting the compensation data; and

a third step of detecting an amount of a change in a factor causing fluctuation in effective power during recording and adjusting emitted power based on this detected value, the compensation data, and the compensation correction value.